

# WEST SYSTEM® SIX10® Part B Hardener

## Safety Data Sheet

According to the Hazard Communication Standard (CFR29 1910.1200) HazCom 2012 and the Hazardous Products Regulations (HPR) WHMIS 2015

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Version: 610B-2022a

### SECTION 1: Identification

#### 1.1. Identification

Product form : Mixture  
Product name : WEST SYSTEM® SIX10® Part B Hardener  
Product code : 610B  
Chemical Family : Rubber modified-polyamine mixture.

#### 1.2. Recommended use and restrictions on use

Recommended use : Curing agent for epoxy resins

#### 1.3. Supplier

##### Supplier

Gougeon Brothers, Inc  
100 Patterson Ave.  
Bay City, MI 48706 - U.S.A.  
T 888-377-6738 or 989-684-7286  
[www.prosetepoxy.com](http://www.prosetepoxy.com)

##### Distributor

#### 1.4. Emergency telephone number

Emergency number : CHEMTREC 1 (800) 424-9300  
CHEMTREC International +1 (703) 527-3887 24 hr

### SECTION 2: Hazard(s) identification

#### 2.1. Classification of the substance or mixture

##### GHS classification

Skin Corr. 1B  
Eye Dam. 1  
Skin Sens. 1  
Muta. 2  
STOT RE 2  
Aquatic Acute 3  
Aquatic Chronic 3

#### 2.2. GHS Label elements, including precautionary statements

##### GHS labelling

Hazard pictograms (GHS) :



Signal word (GHS) :

Danger

Hazard statements (GHS) :

Causes severe skin burns and eye damage.  
May cause an allergic skin reaction.  
Suspected of causing genetic defects.  
May cause damage to organs through prolonged or repeated exposure.  
Harmful to aquatic life with long lasting effects.

Precautionary statements (GHS) :

Obtain special instructions before use.  
Do not handle until all safety precautions have been read and understood.

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Do not breathe dust/fume/gas/mist/vapours/spray.  
Wash hands, forearms and face thoroughly after handling.  
Contaminated work clothing must not be allowed out of the workplace.  
Avoid release to the environment.  
Wear protective gloves/protective clothing/eye protection/face protection.  
If exposed or concerned: Get medical advice/attention.  
If swallowed: rinse mouth. Do NOT induce vomiting.  
If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.  
Wash contaminated clothing before reuse.  
If skin irritation or rash occurs: Get medical advice/attention.  
If inhaled: Remove person to fresh air and keep comfortable for breathing.  
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
Immediately call a poison center or doctor.  
Get medical advice/attention if you feel unwell.  
Store locked up.  
Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

### 2.3. Other hazards which do not result in classification

No additional information available

### 2.4. Unknown acute toxicity

Not applicable

## SECTION 3: Composition/information on ingredients

### 3.1. Substances

Not applicable

### 3.2. Mixtures

Name	Chemical name / Synonyms	Product identifier	%
2-Propenenitrile, polymer with 1,3-butadiene, 1-cyano-1-methyl-4-oxo-4-[[2-(1-piperazinyl)ethyl]amino]butyl-terminated	2-Propenenitrile, polymer with 1,3-butadiene, 1-cyano-1-methyl-4-oxo-4-[[2-(1-piperazinyl)ethyl]amino]butyl-terminated 2-Propenenitrile, polymer with 1,3-butadiene, 1-cyano-1-methyl-4-oxo-4-[[2-(1-piperazinyl)ethyl]amino]butyl terminated	CAS-No.: 68683-29-4	10 – 30
Poly[oxy(methyl-1,2-ethanediyl)], .alpha.-(2-aminomethylethyl)-.omega.-(2-aminomethylethoxy)-	Poly[oxy(methyl-1,2-ethanediyl)], .alpha.-(2-aminomethylethyl)-.omega.-(2-aminomethylethoxy)- Propylene glycol diamine, 2-amino-, diether with Propylene / Polypropylene glycol bis(2-aminopropyl) ether / Jeffamine D-230 / Diaminopolypropylene glycol / Polypropylene glycol bis(aminopropyl) ether / Poly(oxy(methyl-1,2-ethanediyl)), .alpha.-(2-aminomethylethyl)-.omega.-(2-aminomethylethoxy)- / Reaction products of propane-1,2-diol, propoxylated by amination of the terminal hydroxyl groups / O,O'-Bis(2-aminopropyl)polypropylene glycol / Poly(oxypropylene)diamine / .alpha.-[2-(Aminomethyl)ethyl]-.omega.-(2-aminomethylethoxy)poly[oxy(methylethylene)] / Poly(propyleneglycol)diamine / Reaction products of di-, tri- and tetra-propoxylated propane-1,2-diol with ammonia / PPG-70 BIS-(2-AMINOPROPYL) ETHER / Bis(2-aminopropyl) ether of polypropyleneglycol	CAS-No.: 9046-10-0	10 – 30
Benzyl alcohol	Benzyl alcohol	CAS-No.: 100-51-6	10 – 30

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	Benzenecarbinol / Benzenemethanol / Methanol, phenyl- / Phenylmethanol / Phenylmethyl alcohol / BENZYL ALCOHOL / .alpha.-Hydroxytoluene / Benzylalcohol		
Non-hazardous	Non-hazardous	CAS-No.: Trade Secret	7 – 13
Formaldehyde, polymer with N,N'-bis(2-aminoethyl)-1,2-ethanediamine and phenol	Formaldehyde, polymer with N,N'-bis(2-aminoethyl)-1,2-ethanediamine and phenol Formaldehyde, oligomeric reaction products with phenol and triethylenetetramine / Formaldehyde, polymer with N1,N2-bis(2-aminoethyl)-1,2-ethanediamine and phenol / Cross-linked phenol-formaldehyde activated with triethylenetetramine / Phenol-formaldehyde, cross-linked, triethylenetetramine activated / Formaldehyde, polymer with N,N'-bis(2-aminoethyl)1,2-ethanediamine and phenol / Formaldehyde-phenol-triethylenetetraamine copolymer	CAS-No.: 32610-77-8	7 – 13
Triethylenetetramine	Triethylenetetramine Araldite hardener HY 951 / N,N'-Bis(2-aminoethyl)-1,2-ethanediamine / N,N'-Bis(2-aminoethyl)ethylenediamine / DEH 24 / Ethane-1,2-diamine, N,N'-bis(2-aminoethyl)- / 1,2-Ethanediamine, N,N'-bis(2-aminoethyl)- / Ethylenediamine, N,N'-bis(2-aminoethyl)- / HY 951 / Trientine / 1,2-Ethanediamine, N1,N2-bis(2-aminoethyl)- / TETA / 3,6-Diazaoctane-1,8-diamine / 3,6-Diazaoctanethylenediamine / 3,6-Diazaoctane-1,8-diylidiamine	CAS-No.: 112-24-3	7 – 13
Silica, amorphous, fumed, crystalline-free	Silica, amorphous, fumed, crystalline-free Colloidal silica / Silica, amorphous, fumed / Pyrogenic colloidal silica / Synthetic amorphous silica / Pyrogenic, fumed, amorphous silica / Silica, amorphous, crystalline-free / Aquafil / Amorphous silicon dioxide / Silica, amorphous, fumed, crystalline free / Fumed silica / Amorphous silica / Silica, amorphous / Fumed, crystalline-free amorphous silica	CAS-No.: 112945-52-5	5 – 10
Phenol, 2,4,6-tris[(dimethylamino)methyl]-, reaction products with triethylenetetramine	Phenol, 2,4,6-tris[(dimethylamino)methyl]-, reaction products with triethylenetetramine	CAS-No.: 1101788-77-5	1 – 5
Phenol	Phenol Hydroxybenzene / Monohydroxybenzene / Phenic acid / Benzene, hydroxy- / Carboic acid	CAS-No.: 108-95-2	1 – 5
1,3-Benzenedimethanamine	1,3-Benzenedimethanamine Benzene, 1,3-di(aminomethyl)- / 1,3-Bis(aminomethyl)benzene / m-Phenylenebis(methylamine) / m-Xylene-.alpha.,.alpha.'-diamine / m-Xylylenediamine / Bis(aminomethyl)benzene, 1,3- / 3-(Aminomethyl)benzylamine / Xylylenediamine, m- / MXDA / .alpha.,.alpha.'-Diamino-1,3-dimethylbenzene / 1,3-Xylenediamine / m-Xylenediamine	CAS-No.: 1477-55-0	1 – 5
Diethylenetriamine-bisphenol A-epichlorohydrin polymer	Diethylenetriamine-bisphenol A-epichlorohydrin polymer Phenol, 4,4'-(1-methylethylidene)bis-, polymer with N-(2-aminoethyl)-1,2-ethanediamine and (chloromethyl)oxirane / 4,4'-Isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane, reaction products with diethylenetriamine / Phenol, 4,4'-(1-methylethylidene)bis-, polymer with N1-(2-aminoethyl)-1,2-ethanediamine and 2-(chloromethyl)oxirane / Phenol, 4,4'-(1-methylethylidene)bis-, polymer with N-(2-aminoethyl)-1,2-ethanediamine and(chloromethyl)oxirane	CAS-No.: 31326-29-1	1 – 5
Diethylenetriamine	Diethylenetriamine	CAS-No.: 111-40-0	1 – 5

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	Bis(2-aminoethyl)amine / 2,2'-Diaminodiethylamine / Diethylamine, 2,2'-diamino- / Ethane-1,2-diamine, N-(2-aminoethyl)- / 1,2-Ethanediamine, N-(2-aminoethyl)- / Ethylenediamine, N-(2-aminoethyl)- / 2,2'-Iminobis(ethanamine) / 2,2'-Iminodi(ethylamine) / 1,4,7-Triazaheptane / N-(2-Aminoethyl)-1,2-ethanediamine / 1,2-Ethanediamine, N1-(2-aminoethyl)- / 3-Azapentane-1,5-diamine / DETA / N-(2-Aminoethyl)ethane-1,2-diamine / 2,2'-Iminobis(ethylamine) / 2,2'-Iminodiethylamine		
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Comments : The exact chemical identity and/or exact percentage (concentration) of each ingredient may be held as confidential business information (CBI). Any ingredient not disclosed in this section may have been determined not to be hazardous to health or the environment, or it may be present at a level below its disclosure threshold. Refer to Section 15 for additional information regarding this CBI claim.

### SECTION 4: First-aid measures

#### 4.1. Description of first aid measures

First-aid measures after inhalation : If inhaled and if breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing. Immediately call a POISON CENTER/doctor.

First-aid measures after skin contact : IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. Wash contaminated clothing before reuse. Immediately call a POISON CENTER/doctor.

First-aid measures after eye contact : IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER/doctor.

First-aid measures after ingestion : If swallowed, do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Immediately call a POISON CENTER/doctor.

#### 4.2. Most important symptoms and effects (acute and delayed)

Symptoms/effects after inhalation : May cause respiratory tract irritation.

Symptoms/effects after skin contact : Causes severe burns. Symptoms may include redness, pain, blisters. May cause an allergic skin reaction.

Symptoms/effects after eye contact : Causes serious eye damage. Symptoms may include discomfort or pain, excess blinking and tear production, with marked redness and swelling of the conjunctiva.

Symptoms/effects after ingestion : May be harmful if swallowed. May cause burns or irritation of the linings of the mouth, throat, and gastrointestinal tract. May cause stomach distress, nausea or vomiting.

Chronic symptoms : Suspected of causing genetic defects. May cause damage to organs through prolonged or repeated exposure.

#### 4.3. Immediate medical attention and special treatment, if necessary

Symptoms may not appear immediately. In case of accident or if you feel unwell, seek medical advice immediately (show the label or SDS where possible).

### SECTION 5: Fire-fighting measures

#### 5.1. Suitable (and unsuitable) extinguishing media

Suitable extinguishing media : Foam. Carbon dioxide. Dry chemical.

Unsuitable extinguishing media : Do not use a heavy water stream.

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### 5.2. Specific hazards arising from the chemical

Fire hazard : Products of combustion may include, and are not limited to: oxides of carbon. Oxides of nitrogen. Amines. Ammonia. Nitric acid. Aldehydes. Nitrosamines. When mixed with sawdust, wood chips, or other cellulosic material, spontaneous combustion can occur under certain conditions. Heat is generated as the air oxidizes the amine. If the heat is not dissipated quickly enough, it can ignite the sawdust.

### 5.3. Special protective equipment and precautions for fire-fighters

Protection during firefighting : Keep upwind of fire. Wear full fire fighting turn-out gear (full Bunker gear) and respiratory protection (SCBA). Use water spray to keep fire-exposed containers cool.

## SECTION 6: Accidental release measures

### 6.1. Personal precautions, protective equipment and emergency procedures

General measures : Use personal protection recommended in Section 8. Isolate the hazard area and deny entry to unnecessary and unprotected personnel.

#### 6.1.1. For non-emergency personnel

No additional information available

#### 6.1.2. For emergency responders

No additional information available

### 6.2. Environmental precautions

Prevent entry to sewers and public waters. Notify authorities if product enters sewers or public waters. Collect spillage.

### 6.3. Methods and material for containment and cleaning up

For containment : Contain and/or absorb spill with inert material (e.g. sand, vermiculite), then place in a suitable container. Do not flush to sewer or allow to enter waterways. Use appropriate Personal Protective Equipment (PPE).

Methods for cleaning up : Sweep or shovel spills into appropriate container for disposal. Provide ventilation.

### 6.4. Reference to other sections

See section 8 for further information on protective clothing and equipment and section 13 for advice on waste disposal.

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

Precautions for safe handling : Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not get in eyes, on skin, or on clothing. Do not breathe dust, fume, gas, mist, vapours, spray. Do not swallow. Handle and open container with care. Do not eat, drink or smoke when using this product. Use personal protective equipment as required. When mixed with epoxy resin this product causes an exothermic reaction, which in large masses, can produce enough heat to damage or ignite surrounding materials and emit fumes and vapors that vary widely in composition and toxicity. Ensure adequate ventilation.

Hygiene measures : Wash contaminated clothing before reuse. Wash hands before eating, drinking, or smoking.

### 7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Keep out of the reach of children. Keep container tightly closed. Store in dry, cool, well-ventilated area. Protect from sunlight. Storage temperature : 40°F (4°C) - 90°F (32°C). Store locked up.

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### SECTION 8: Exposure controls/personal protection

#### 8.1. Control parameters

<b>WEST SYSTEM® SIX10® Part B Hardener</b>	
No additional information available	
<b>2-Propenenitrile, polymer with 1,3-butadiene, 1-cyano-1-methyl-4-oxo-4-[[2-(1-piperazinyl)ethyl]amino]butyl-terminated (68683-29-4)</b>	
No additional information available	
<b>Poly[oxy(methyl-1,2-ethanediy)], .alpha.-(2-aminomethylethyl)-.omega.-(2-aminomethylethoxy)- (9046-10-0)</b>	
No additional information available	
<b>Benzyl alcohol (100-51-6)</b>	
<b>TWA - Occupational Exposure Limits</b>	
TWA (WEEL)	10 ppm
<b>Non-hazardous (Trade Secret)</b>	
No additional information available	
<b>Formaldehyde, polymer with N,N'-bis(2-aminoethyl)-1,2-ethanediamine and phenol (32610-77-8)</b>	
No additional information available	
<b>Triethylenetetramine (112-24-3)</b>	
<b>AIHA - Occupational Exposure Limits</b>	
AIHA WEEL	1ppm ; 6 mg/ m3; Absorbed via skin
<b>Phenol, 2,4,6-tris[(dimethylamino)methyl]-, reaction products with triethylenetetramine (1101788-77-5)</b>	
<b>AIHA - Occupational Exposure Limits</b>	
AIHA WEEL ((Reference Triethylenetetramine, CAS# 112-24-3))	1ppm ; 6 mg/ m3; Absorbed via skin
<b>Silica, amorphous, fumed, crystalline-free (112945-52-5)</b>	
<b>USA - ACGIH - Occupational Exposure Limits</b>	
ACGIH OEL TWA	10 mg/m <sup>3</sup> (Inhalable) 3 mg/m <sup>3</sup> (Respirable)
<b>USA - OSHA - Occupational Exposure Limits</b>	
OSHA PEL TWA [1]	6 mg/m <sup>3</sup> (Amorphous silica) 15 mg/m <sup>3</sup> (Total dust) 5 mg/m <sup>3</sup> (Respirable fraction)
<b>Phenol (108-95-2)</b>	
<b>USA - ACGIH - Occupational Exposure Limits</b>	
ACGIH OEL TWA	19 mg/m <sup>3</sup>
ACGIH OEL TWA [ppm]	5 ppm
ACGIH chemical category	Not Classifiable as a Human Carcinogen, Skin - potential significant contribution to overall exposure by the cutaneous route
<b>USA - ACGIH - Biological Exposure Indices</b>	
BEI	250 mg/g creatinine Parameter: Phenol with hydrolysis - Medium: urine - Sampling time: end of shift (background, nonspecific)
<b>USA - OSHA - Occupational Exposure Limits</b>	
OSHA PEL TWA [1]	19 mg/m <sup>3</sup>
OSHA PEL TWA [2]	5 ppm
Limit value category (OSHA)	prevent or reduce skin absorption
<b>USA - IDLH - Occupational Exposure Limits</b>	
IDLH [ppm]	250 ppm
<b>USA - NIOSH - Occupational Exposure Limits</b>	
NIOSH REL TWA	19 mg/m <sup>3</sup>
NIOSH REL TWA [ppm]	5 ppm
NIOSH REL C	60 mg/m <sup>3</sup>
NIOSH REL C [ppm]	15.6 ppm
US-NIOSH chemical category	SK: SYS(FATAL)-DIR(COR) Apr 2011

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<b>1,3-Benzenedimethanamine (1477-55-0)</b>	
<b>USA - ACGIH - Occupational Exposure Limits</b>	
ACGIH OEL C [ppm]	0.018 ppm
ACGIH chemical category	Skin - potential significant contribution to overall exposure by the cutaneous route
<b>USA - NIOSH - Occupational Exposure Limits</b>	
NIOSH REL C	0.1 mg/m <sup>3</sup>
US-NIOSH chemical category	Potential for dermal absorption
<b>Diethylenetriamine-bisphenol A-epichlorohydrin polymer (31326-29-1)</b>	
<b>USA - ACGIH - Occupational Exposure Limits</b>	
ACGIH OEL TWA	Refer to Diethylenetriamine
<b>Diethylenetriamine (111-40-0)</b>	
<b>USA - ACGIH - Occupational Exposure Limits</b>	
ACGIH OEL TWA [ppm]	1 ppm
ACGIH chemical category	Skin - potential significant contribution to overall exposure by the cutaneous route
<b>USA - NIOSH - Occupational Exposure Limits</b>	
NIOSH REL TWA	4 mg/m <sup>3</sup>
NIOSH REL TWA [ppm]	1 ppm
US-NIOSH chemical category	SK: SYS-DIR(COR)-SEN Oct 2020

### 8.2. Appropriate engineering controls

- Appropriate engineering controls : Use ventilation adequate to keep exposures (airborne levels of dust, fume, vapor, etc.) below recommended exposure limits.
- Environmental exposure controls : Maintain levels below Community environmental protection thresholds.

### 8.3. Individual protection measures/Personal protective equipment

<b>Hand protection:</b>
Wear suitable gloves.
<b>Eye protection:</b>
Wear approved eye protection (properly fitted dust- or splash-proof chemical safety goggles) and face protection (face shield).
<b>Skin and body protection:</b>
Wear suitable protective clothing
<b>Respiratory protection:</b>
In case of insufficient ventilation, wear suitable respiratory equipment. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

#### Other information:

Do not eat, smoke or drink where material is handled, processed or stored. Wash hands carefully before eating or smoking. Handle according to established industrial hygiene and safety practices.

## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Appearance	: Gel
Colour	: Off-white
Odour	: Amine-like
Odour threshold	: No data available
pH	: 10.59

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Melting point	: No data available
Freezing point	: No data available
Boiling point	: No data available
Flash point	: > 300 °F (149°C) estimated based similar product.
Relative evaporation rate (butylacetate=1)	: No data available
Flammability (solid, gas)	: Non flammable.
Vapour pressure	: No data available
Relative vapour density at 20 °C	: No data available
Relative density	: 1.04
Solubility	: No data available
Partition coefficient n-octanol/water	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosive limits	: No data available
Explosive properties	: No data available
Oxidising properties	: No data available

### 9.2. Other information

VOC content	: 11.8 g/l (0.10 lbs/gal)
Bulk density	: 8.67 lb/gal (1.04 kg/L)

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

No dangerous reaction known under conditions of normal use.

### 10.2. Chemical stability

Stable under normal storage conditions.

### 10.3. Possibility of hazardous reactions

No dangerous reaction known under conditions of normal use. A mass of more than one pound of product plus an epoxy resin will cause irreversible polymerization with significant heat buildup and pressure.

### 10.4. Conditions to avoid

Heat. Ignition sources. Incompatible materials.

### 10.5. Incompatible materials

Acids. oxidizing materials. Halogenated compounds. External heating or self-heating could result in rapid temperature increase and pressure build up. If such a condition were to occur in a drum, the drum could expand and rupture violently.

### 10.6. Hazardous decomposition products

May include, and are not limited to: oxides of carbon. Oxides of nitrogen. Amines. Ammonia. Nitric acid. Aldehydes. Nitrosamines.

## SECTION 11: Toxicological information

### 11.1. Information on toxicological effects

Acute toxicity (oral)	: Not classified.
Acute toxicity (dermal)	: Not classified.
Acute toxicity (inhalation)	: Not classified.



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Ingredient Name	CAS#	LD <sub>50</sub> Oral	LD <sub>50</sub> Dermal	LC <sub>50</sub> Inhalation
2-Propenenitrile, polymer with 1,3-butadiene, 1-cyano-1-methyl-4-oxo-4-[[2-(1-piperazinyl)ethyl]amino]butyl-terminated	68683-29-4	>15,400 mg/kg	>3000 mg/kg	No data available
Poly[oxy(methyl-1,2-ethanediyl)], .alpha.-(2-aminomethylethyl)-.omega.-(2-aminomethylethoxy)-	9046-10-0	2855 mg/kg	2980 mg/kg	>0.74 mg/L 8h vapor
Benzyl alcohol	100-51-6	1620 mg/kg	No data available	>4.18 mg/l 4h aerosol
Non-hazardous	NA	No data available	No data available	No data available
Formaldehyde, polymer with N,N'-bis(2-aminoethyl)-1,2-ethanediamine and phenol	32610-77-8	No data	No data	No data
Triethylenetetramine	112-24-3	1716 mg/kg	1465 mg/kg	No data
Phenol, 2,4,6-tris[(dimethylamino)methyl]-, reaction products with triethylenetetramine	1101788-77-5	1716 mg/kg (reference Triethylenetetramine)	1465 mg/kg	No data
Silica, amorphous, fumed, crystalline-free	112945-52-5	>5000 mg/kg	>2000 mg/kg	No data
Phenol	108-95-2	317 mg/kg	630 mg/kg (solid)	0.9 mg/l; 8h
1,3-Benzenedimethanamine	1477-55-0	980 mg/kg	2000 mg/kg	1.34 mg/l 4h mist / aerosol
Diethylenetriamine-bisphenol A-epichlorohydrin polymer	31326-29-1	1620 mg/kg	No data available	No data available
Diethylenetriamine	111-40-0	1080 mg/kg	1090 mg/kg	**0.07-0.3 mg/l 4h mist/aerosol

\*\*LC50 data has been generated for this substance by subjecting rats to an airborne aerosol/mist atmosphere in a test chamber. It has not been determined that this data directly correlates to an inherent hazard of this product as would be expected under normal, foreseeable or anticipated conditions of use.

Skin corrosion/irritation	: Causes severe skin burns. pH: 10.59
Serious eye damage/irritation	: Causes serious eye damage. pH: 10.59
Respiratory or skin sensitisation	: May cause an allergic skin reaction.
Germ cell mutagenicity	: Suspected of causing genetic defects.
Carcinogenicity	: Not classified.

### Silica, amorphous, fumed, crystalline-free (112945-52-5)

IARC group	3 - Not classifiable
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### Phenol (108-95-2)

IARC group	3 - Not classifiable
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Reproductive toxicity : Not classified.

STOT-single exposure : Not classified.

### Silica, amorphous, fumed, crystalline-free (112945-52-5)

STOT-single exposure	May cause respiratory irritation.
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### Phenol (108-95-2)

STOT-single exposure	Causes damage to organs.
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### Diethylenetriamine-bisphenol A-epichlorohydrin polymer (31326-29-1)

STOT-single exposure	May cause respiratory irritation.
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: May cause damage to organs through prolonged or repeated exposure.

STOT-repeated exposure

### Benzyl alcohol (100-51-6)

NOAEL (oral, rat, 90 days)	400 mg/kg bodyweight Animal: rat, Guideline: other:
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### Phenol (108-95-2)

LOAEL (dermal, rat/rabbit, 90 days)	260 mg/kg bodyweight Animal: rabbit
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NOAEL (dermal, rat/rabbit, 90 days)	130 mg/kg bodyweight Animal: rabbit
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STOT-repeated exposure	May cause damage to organs through prolonged or repeated exposure.
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<b>Diethylenetriamine-bisphenol A-epichlorohydrin polymer (31326-29-1)</b>	
NOAEL (oral, rat, 90 days)	60 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 422 (Combined Repeated Dose Toxicity Study with the Reproduction / Developmental Toxicity Screening Test)
<b>Diethylenetriamine (111-40-0)</b>	
LOAEL (oral, rat, 90 days)	530 – 620 mg/kg bodyweight Animal: rat, Guideline: other:
NOAEL (oral, rat, 90 days)	70 – 80 mg/kg bodyweight Animal: rat, Guideline: other:
Aspiration hazard	: Not classified.
Symptoms/effects after inhalation	: May cause respiratory tract irritation.
Symptoms/effects after skin contact	: Causes severe burns. Symptoms may include redness, pain, blisters. May cause an allergic skin reaction.
Symptoms/effects after eye contact	: Causes serious eye damage. Symptoms may include discomfort or pain, excess blinking and tear production, with marked redness and swelling of the conjunctiva.
Symptoms/effects after ingestion	: May be harmful if swallowed. May cause burns or irritation of the linings of the mouth, throat, and gastrointestinal tract. May cause stomach distress, nausea or vomiting.
Chronic symptoms	: Suspected of causing genetic defects. May cause damage to organs through prolonged or repeated exposure.
Other information	: Likely routes of exposure: ingestion, inhalation, skin and eye.

## SECTION 12: Ecological information

### 12.1. Toxicity

Ecology - general : Harmful to aquatic life with long lasting effects.

<b>Poly[oxy(methyl-1,2-ethanediyl)], .alpha.-(2-aminomethylethyl)-.omega.-(2-aminomethylethoxy)- (9046-10-0)</b>	
EC50 - Crustacea [1]	80 mg/l Test organisms (species): Daphnia magna
NOEC (chronic)	7.64 mg/l Test organisms (species):
<b>Benzyl alcohol (100-51-6)</b>	
LC50 - Fish [1]	460 mg/l (Exposure time: 96 h - Species: Pimephales promelas [static])
EC50 - Crustacea [1]	23 mg/l (Exposure time: 48 h - Species: water flea)
LC50 - Fish [2]	10 mg/l (Exposure time: 96 h - Species: Lepomis macrochirus [static])
NOEC chronic fish	48897 mg/l Test organisms (species): other: Duration: '30 d'
<b>Triethylenetetramine (112-24-3)</b>	
LC50 - Fish [1]	570 mg/l (Exposure time: 96 h - Species: Poecilia reticulata [semi-static])
EC50 - Crustacea [1]	31.1 mg/l (Exposure time: 48 h - Species: Daphnia magna)
LC50 - Fish [2]	495 mg/l (Exposure time: 96 h - Species: Pimephales promelas)
<b>Phenol (108-95-2)</b>	
LC50 - Fish [1]	11.9 – 50.5 mg/l (Exposure time: 96 h - Species: Pimephales promelas [flow-through])
EC50 - Crustacea [1]	4.24 – 10.7 mg/l (Exposure time: 48 h - Species: Daphnia magna [Static])
LC50 - Fish [2]	20.5 – 25.6 mg/l (Exposure time: 96 h - Species: Pimephales promelas [static])
EC50 - Crustacea [2]	10.2 – 15.5 mg/l (Exposure time: 48 h - Species: Daphnia magna)
NOEC (chronic)	0.16 mg/l Test organisms (species): Daphnia magna Duration: '16 d'
NOEC chronic fish	0.077 mg/l Test organisms (species): other: Duration: '60 d'
<b>1,3-Benzenedimethanamine (1477-55-0)</b>	
LC50 - Fish [1]	87.6 mg/l (Exposure time: 96 h - Species: Oryzias latipes [semi-static])
EC50 - Crustacea [1]	15.2 mg/l Test organisms (species): Daphnia magna
LOEC (chronic)	15 mg/l Test organisms (species): Daphnia magna Duration: '21 d'
NOEC (chronic)	4.7 mg/l Test organisms (species): Daphnia magna Duration: '21 d'
<b>Diethylenetriamine-bisphenol A-epichlorohydrin polymer (31326-29-1)</b>	
LC50 - Fish [1]	> 47 mg/l Test organisms (species): Oncorhynchus mykiss (previous name: Salmo gairdneri)
<b>Diethylenetriamine (111-40-0)</b>	
LC50 - Fish [1]	248 mg/l (Exposure time: 96 h - Species: Poecilia reticulata [static])
EC50 - Crustacea [1]	16 mg/l (Exposure time: 48 h - Species: Daphnia magna)
LC50 - Fish [2]	1014 mg/l (Exposure time: 96 h - Species: Poecilia reticulata [semi-static])
EC50 - Crustacea [2]	16 mg/l Test organisms (species): Daphnia magna

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LOEC (chronic)	11.3 mg/l Test organisms (species): Daphnia magna Duration: '21 d'
NOEC (chronic)	5.6 mg/l Test organisms (species): Daphnia magna Duration: '21 d'
NOEC chronic fish	> 10 mg/l Test organisms (species): Gasterosteus aculeatus Duration: '28 d'

Ingredient	CAS#	Ecotoxicity
2-Propenenitrile, polymer with 1,3-butadiene, 1-cyano-1-methyl-4-oxo-4-[[2-(1-piperaziny)ethyl]amino]butyl-terminated	68683-29-4	No data available
Poly[oxy(methyl-1,2-ethanediyl)], .alpha.-(2-aminomethylethyl)-.omega.-(2-aminomethylethoxy)-	9046-10-0	Acute Aquatic Cat. 3; Chronic Aquatic Cat. 2
Benzyl alcohol	100-51-6	No data available
Non-hazardous	NA	No data available
Formaldehyde, polymer with N,N'-bis(2-aminoethyl)-1,2-ethanediamine and phenol	32610-77-8	Aquatic Chronic Cat. 3
Triethylenetetramine	112-24-3	Aquatic Chronic Cat. 3
Phenol, 2,4,6-tris[(dimethylamino)methyl]-, reaction products with triethylenetetramine	1101788-77-5	(Reference Triethylenetetramine); Aquatic Chronic Cat. 3
Silica, amorphous, fumed, crystalline-free	112945-52-5	No data available
Phenol	108-95-2	Aquatic Acute Cat. 3; Aquatic Chronic Cat. 2
1,3-Benzenedimethanamine	1477-55-0	Acute Aquatic Cat. 3; Chronic Aquatic Cat. 3
Diethylenetriamine-bisphenol A-epichlorohydrin polymer	31326-29-1	No data available
Diethylenetriamine	111-40-0	No data available

### 12.2. Persistence and degradability

WEST SYSTEM® SIX10® Part B Hardener	
Persistence and degradability	Not established.

### 12.3. Bioaccumulative potential

WEST SYSTEM® SIX10® Part B Hardener	
Bioaccumulative potential	Not established.

Benzyl alcohol (100-51-6)	
Partition coefficient n-octanol/water	1.1

Triethylenetetramine (112-24-3)	
BCF - Fish [1]	(no bioaccumulation expected)
Partition coefficient n-octanol/water	-1.4

Phenol (108-95-2)	
BCF - Fish [1]	(no significant bioaccumulation)
Partition coefficient n-octanol/water	1.5

Diethylenetriamine (111-40-0)	
BCF - Fish [1]	0.3 – 1.7
Partition coefficient n-octanol/water	-1.3

### 12.4. Mobility in soil

WEST SYSTEM® SIX10® Part B Hardener	
Ecology - soil	No additional information available.

### 12.5. Other adverse effects

Other information : Avoid release to the environment.

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### SECTION 13: Disposal considerations

#### 13.1. Disposal methods

Product/Packaging disposal recommendations : Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

### SECTION 14: Transport information

In accordance with DOT / TDG / IMDG / IATA

#### 14.1. UN number

UN-No.(DOT/TDG) : UN3259  
UN-No. (IMDG) : 3259  
UN-No. (IATA) : 3259

#### 14.2. UN proper shipping name

Proper Shipping Name (DOT/TDG) : Polyamines, solid, corrosive n.o.s. (Polyoxypropylenediamine)  
Proper Shipping Name (IMDG) : POLYAMINES, SOLID, CORROSIVE, N.O.S. (Polyoxypropylenediamine)  
Proper Shipping Name (IATA) : Polyamines, solid, corrosive, n.o.s. (Polyoxypropylenediamine)

#### 14.3. Transport hazard class(es)

##### Department of Transportation (DOT) and Transportation of Dangerous Goods (TDG)

Class (DOT/TDG) : 8  
Hazard labels (DOT/TDG) : 8



##### IMDG

Transport hazard class(es) (IMDG) : 8  
Danger labels (IMDG) : 8



##### IATA

Transport hazard class(es) (IATA) : 8  
Danger labels (IATA) : 8



#### 14.4. Packing group

Packing group (DOT/TDG) : III  
Packing group (IMDG) : III  
Packing group (IATA) : III

# WEST SYSTEM® SIX10® Part B Hardener

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According to the Hazard Communication Standard (CFR29 1910.1200) HazCom 2012 and the Hazardous Products Regulations (HPR) WHMIS 2015

### 14.5. Environmental hazards

Marine Pollutant : No  
Other information : No supplementary information available.

### 14.6. Special precautions for user

Special transport precautions : Do not handle until all safety precautions have been read and understood.

### 14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

## SECTION 15: Regulatory information

### 15.1. US Federal regulations

All components of this product are present and listed as Active on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory.

All components of this product are listed, or excluded from listing, on the Canadian DSL (Domestic Substances List) inventory.


#### Phenol, 2,4,6-tris[(dimethylamino)methyl]-, reaction products with triethylenetetramine (1101788-77-5)

Listed on the Canadian NDSL (Non-Domestic Substances List)

### 15.2. International regulations

No additional information available

### 15.3. US State regulations

 **WARNING:** This product can expose you to Propylene oxide, which is known to the State of California to cause cancer. For more information go to [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov).

Propylene oxide (75-56-9)				
U.S. - California - Proposition 65 - Carcinogens List	U.S. - California - Proposition 65 - Developmental Toxicity	U.S. - California - Proposition 65 - Reproductive Toxicity - Female	U.S. - California - Proposition 65 - Reproductive Toxicity - Male	No significant risk level (NSRL)
Yes	No	No	No	

#### Benzyl alcohol (100-51-6)

U.S. - Pennsylvania - RTK (Right to Know) List  
U.S. - Massachusetts - Right To Know List

#### Triethylenetetramine (112-24-3)

U.S. - New Jersey - Right to Know Hazardous Substance List  
U.S. - Pennsylvania - RTK (Right to Know) List  
U.S. - Massachusetts - Right To Know List

#### Phenol (108-95-2)

U.S. - New Jersey - Right to Know Hazardous Substance List  
U.S. - Pennsylvania - RTK (Right to Know) List  
U.S. - Massachusetts - Right To Know List  
U.S. - Pennsylvania - RTK (Right to Know) - Environmental Hazard List

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<b>1,3-Benzenedimethanamine (1477-55-0)</b> U.S. - New Jersey - Right to Know Hazardous Substance List U.S. - Pennsylvania - RTK (Right to Know) List U.S. - Massachusetts - Right To Know List
<b>Diethylenetriamine (111-40-0)</b> U.S. - New Jersey - Right to Know Hazardous Substance List U.S. - Pennsylvania - RTK (Right to Know) List U.S. - Massachusetts - Right To Know List
<b>Propylene oxide (75-56-9)</b> U.S. - New Jersey - Right to Know Hazardous Substance List U.S. - Pennsylvania - RTK (Right to Know) List U.S. - Massachusetts - Right To Know List U.S. - Pennsylvania - RTK (Right to Know) - Special Hazardous Substances U.S. - Pennsylvania - RTK (Right to Know) - Environmental Hazard List

### SECTION 16: Other information

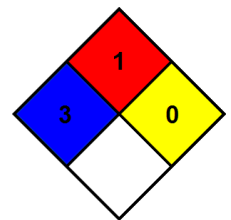
According to the Hazard Communication Standard (CFR29 1910.1200) HazCom 2012 and the Hazardous Products Regulations (HPR) WHMIS 2015

Revision date : 01/03/2022  
Other information : None.  
Prepared by : Nexreg Compliance Inc.  
[www.Nexreg.com](http://www.Nexreg.com)



Full text of H-statements	
Aquatic Acute 3	Hazardous to the aquatic environment — Acute Hazard, Category 3
Aquatic Chronic 3	Hazardous to the aquatic environment — Chronic Hazard, Category 3
Eye Dam. 1	Serious eye damage/eye irritation, Category 1
Muta. 2	Germ cell mutagenicity, Category 2
Skin Corr. 1B	Skin corrosion/irritation, Category 1B
Skin Sens. 1	Skin sensitisation, Category 1
STOT RE 2	Specific target organ toxicity — Repeated exposure, Category 2

NFPA health hazard : 3 - Materials that, under emergency conditions, can cause serious or permanent injury.  
NFPA fire hazard : 1 - Materials that must be preheated before ignition can occur.  
NFPA reactivity : 0 - Material that in themselves are normally stable, even under fire conditions.



Hazard Rating  
Health : 3 Serious Hazard - Major injury likely unless prompt action is taken and medical treatment is given  
Flammability : 1 Slight Hazard - Materials that must be preheated before ignition will occur. Includes liquids, solids and semi solids having a flash point above 200 F. (Class IIIB)  
Physical : 0 Minimal Hazard - Materials that are normally stable, even under fire conditions, and will NOT react with water, polymerize, decompose, condense, or self-react. Non-Explosives.

<b>Indication of changes:</b>
SDS update.

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According to the Hazard Communication Standard (CFR29 1910.1200) HazCom 2012 and the Hazardous Products Regulations (HPR) WHMIS 2015

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SDS HazCom 2012 - WHMIS 2015 (Nexreg) 2021 (B&W)

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